

Crystal ball questions on Level 3 Organic practical

All of the following questions have not (as yet!) appeared in the NCEA Level 3 Exams

1) Ethyl Ethanoate is used to decaffeinate tea and coffee, it has a characteristic sweet pear smell.

Discuss in detail the formation of ethyl ethanoate in the lab, using **only ethanol as a starting reagent**. It is not necessary to use a condensor or separating funnel.

You must

- draw relevant structural formula
- write chemical equations
- identify reagents and conditions necessary

2) This is a repeat of question 1 (above) however in this case a condensor and separating funnel must be used.

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You must

- draw relevant structural formula
- write chemical equations
- identify reagents and conditions necessary
- include labelled diagrams in your answer

3) Describe how to carry out simple oxidation of the primary, secondary and tertiary isomers of butan-1-ol. State the reagents and conditions required, draw all structural formula and name the products of each reaction.

4) A liebig condensor is an important part of an organic chemistry toolkit. Draw a sketch of a Liebig condensor, describe in detail how it works, which types of reactions it would be used for and give examples with equations showing the reactants, reagents and products.

5) Describe the reagents and conditions required to produce... Write condensed structural formula for the reactants and products

i) ethanamide for chloroethane

ii) propanoyl chloride from propene